

The Claims:

Following is a complete listing of the claims pending in this application including any amendments:

1-24. (Canceled)

25. (Currently amended) A substantially isolated nucleic acid sequence encoding a polypeptide derived from the carboxy-terminal 549 amino acids of HEV open reading frame 2 and nucleic acid sequences that are selectively hybridizable thereto,

wherein the amino acid sequence of said polypeptide is selected from the group consisting of: SEQ ID NO: 15, SEQ ID NO: 16, sequences having the amino acid terminus of SEQ ID NO: 15 or SEQ ID NO: 16 and a deletion of up to 24 amino acids from the carboxy terminus, ~~and sequences at least 70% homologous thereto,~~ wherein said amino acid sequence encoded by said polynucleotide having the amino acid terminus of SEQ ID NO: 15 or SEQ ID NO: 16 and a deletion of up to 24 amino acids from the carboxy terminus is selected from the group consisting of SEQ ID NOS: 25, 26, 27 and 28.

26. (Withdrawn) An isolated nucleic acid sequence comprising a nucleic acid capable of hybridization to a HEV genome DNA encoding a polypeptide selected from the group consisting of SEQ ID NO:13 and SEQ ID NO:14, wherein said hybridization is carried out under hybridization conditions comprising three washes in 2xSSC, 0.1% SDS, 30 minutes each, and two washes in 2xSSC, 0.1% SDS, 10 minutes each.

27. (Withdrawn) An expression vector for producing a HEV polypeptide antigen composition, comprising

a nucleic acid sequence as recited in claim 26, said nucleic acid sequence inserted into an expression vector, where said nucleic acid sequence is operably linked to a promoter able to initiate transcription in a selected host cell.

28. (Withdrawn) An expression system for producing a HEV polypeptide antigen composition, comprising

a nucleic acid sequence as recited in claim 26, said nucleic acid sequence inserted into an expression vector, wherein said nucleic acid sequence is operably linked to a promoter able to initiate transcription in a selected host cell, and said expression vector is carried within the host cell.

29. (Withdrawn) A method of producing a HEV polypeptide composition, comprising the steps of:

culturing a cell containing the expression vector of claim 27 under conditions sufficient to express a polypeptide sequence encoded by said nucleic acid.

30. (Withdrawn) An isolated nucleic acid sequence comprising a nucleic acid capable of hybridization to a HEV genome DNA encoding a polypeptide selected from the group consisting of SEQ ID NO:17 and SEQ ID NO:18, wherein said hybridization is carried out under hybridization conditions comprising three washes in 2xSSC, 0.1% SDS, 30 minutes each, and two washes in 2xSSC, 0.1% SDS, 10 minutes each.

31. (Withdrawn) An expression vector for producing a HEV polypeptide antigen composition, comprising

a nucleic acid sequence as recited in claim 30, said nucleic acid sequence inserted into an expression vector, where said nucleic acid sequence is operably linked to a promoter able to initiate transcription in a selected host cell.

32. (Withdrawn) An expression system for producing a HEV polypeptide antigen composition, comprising

a nucleic acid sequence as recited in claim 30, said nucleic acid sequence inserted into an expression vector, wherein said nucleic acid sequence is operably

linked to a promoter able to initiate transcription in a selected host cell, and said expression vector is carried within the host cell.

33. (Withdrawn) A method of producing a HEV polypeptide composition, comprising the steps of:

culturing a cell containing the expression vector of claim 31 under conditions sufficient to express a polypeptide sequence encoded by said nucleic acid.